

Breger, A. Kh. and Zhukhovitskii, A. A.
OVER EEN MOGELIJK MECHANISME VAN DE WISSEL
WERKING TUSSEN GEADSORBEERDE ATOMEN
(A Possible Mechanism of Interaction Between Adsor-
bed Atoms) tr. by G. J. M. Fritschy, 11p. 5 refs.
MTWL: 52. (text in Dutch).
Order from OTS or ETC \$1.55

61-17650

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1947,
v. 21, p. 423-430.

DESCRIPTORS: Atoms, *Adsorption, Chemical
reactions, *Catalysts, Surfaces.

61-17650

- I. Breger, A. Kh.
- II. Zhukhovitskii, A. A.
- III. MTWL-52
- IV. Stichting Moelijk
Toegankelijke Wetenschap-
pelijke Literatuur

Office of Technical Services

The Thermodynamics of Solubility in Ternary, Aqueous
Salt Systems Temperature Coefficients of Solubility,
by N. K. Voskresenskaya G. N. Yankovskaya, 11 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXI, 1947, pp
749-758.

SLA R-3006

Sci

Jul 59

92, 445

170/60

(SF-1054)

Active Centers in an Acetylene Flame, by Ye.
Kondrat'yeva, V. Kondrat'yev, 13 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXI, No 7,
1947, pp 761-768.

JPRS 4078

Sci - Chem

Oct 60

128,015

ZHUR FIZ KHIM

Vol XXI, No 6

Jun 1947

16 pp

"The System Iron-Nitrogen at High Pressures"

I. R. Krichevskiy, N. E. Khazanova

OC Digest X
copy in files

14,7114

Effect of the Free Energy of the Process
of Preparing Pyrolytic Nickelous Oxide on
Activated Adsorption, by S. E. Roginskiy,
T. P. Tselinskaya,

RUSSIAN, per, Zhur Fiz Khim, Vol XXI, No 8,
1947, pp 919-926.

~~Scientific - Chemistry~~

~~XXX~~

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ET 471

Scientific - Chemistry Mar 55 CTS

22, 173

On the Kinetics of the Syntesis and Dissociation
of Ammonia on Various Catalysts, by M. Temkin,
S. Kiperman, 39 pp.

RUSSIAN, no per, Zhur Fiz Khim, Vol XXI, 1947,
pp 927-952.

SLA Tr R-762

52,916

Sci - Physics
Sep 57

Veselovskii, V. I.

APPLICATION OF THE PHOTOELECTROCHEMICAL
METHOD TO THE STUDY OF HETEROGENEOUS
PHOTOSENSITIZERS OF THE ZINC OXIDE TYPE
(Primenenie Svetoelektrokhimicheskogo Metoda k
Issledovaniyu Geterogennykh Fotosensitivizatorov Tipa
ZnO). [1962] [10]p. (foreign text included) 6 refs.
Order from OTS or SLA \$1.10 62-16107

Partial trans. (excerpts) of Zhurnal Fizicheskoi Khimii
(USSR) 1947, v. 21, no. 8, p. 983-985.

DESCRIPTORS: *Zinc compounds, *Oxides,
*Photosensitivity, Photochemistry, *Electrochemistry,
Photoelectric effect, Absorption spectra.

62-16107
(Chemistry--Physical, TT, v. 8, no. 5)

62-16107

I. Veselovskii, V. I.

Office of Technical Services

Bruns, B. P.
KATALYSE IN STADIA (Catalysis in stages). 16 p.
25 refs. MTWL: 582. (Text in Dutch).
Order from OTS or ETC \$1.85

61-17297

Trans. of Zhurnal Fizicheskoi Khimii (1947), v. 21,
p. 1011-1018.

DESCRIPTORS: *Catalysis, Adsorption, Theory,
Chemical bonds, Surface properties.

61-17297

- I. Bruns, B. P.
- II. MTWL-582
- III. Stichting Moeilijk
Toegankelijke Wetenschap-
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Office of Technical Services

Kinetics of Carbon Elimination From a Steel Bath,
by L. A. Shvartsman, A. M. Samarin, M. I. ~~Shvartsman~~
Tamkin

RUSSIAN, no per, Zhur Fiz Khim, Vol XXI, No 9,
1947, pp 1027-1032.

Nat Res Lib TT.556
Ottawa, Canada

32,116

3c1 - Chemistry

Sidorov, I. P. and Livshits, V. D.
KINETICA VAN DE AMMONIAKSYNTHESE ONDER
ISOTHERME OMSTANDIGHEDEN (Kinetics of Ammonia
Synthesis in Isothermal Conditions) tr. by
G.J.M. Fritschy. 8p. 4 refs. MTWL: 51.(text in Dutch
Order from OTS or ETC \$1.55 61-17649

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1947,
v. 21, p. 1177-1181.

DESCRIPTORS: *Ammonia, Synthesis, Chemical
reactions, *High pressure research.

61-17649

I. Sidorov, I. P.
II. Livshits, V. D.
III. MTWL-51
IV. Stichting Moelijk
Toegankelijke Wetenschap-
pelijke Literatuur

Office of Technical Services

Effect of Surface-Active Substances on Movement
at the Boundary Between Liquid Media, by
A. Frumkin, V. Levich, 25 p.

RUSSIAN, per, Zhur Fiz Khim, 1947, Vol XII,
No 10, pp 1183-1204.

Sci
Apr 60
Vol III, No 2

ATB-91134R

ATB-RJ-2155

111, 672

Cold Flames and Two-Stage Self-Ignition in
Benzene-Air Mixtures, by A. S. Scholik, et al.
UNCL

RUSSIAN, per, Zhur Fiz Khim, Vol XXI, No 11,
1947, pp 1263-1268.

59-19074
DSIR Lending Library Unit M. 179

Sci - Chem
Apr 59

85,879

Thermal Reaction of Acetylene, IV. The Nature of
the Induction Period, by E. A. Blyumberg, D. A.
Frank-Kamenetskiy,

RUSSIAN, no per, Zhur Fiz Khim, Vol XXI, No 11,
1947, pp 1289-92. _____

AEC TR 349

Scientific - Chemistry
Available - Dr Wyatt's Office in OSI

15, 194

Zhur Fiz Khim, XXI, 1293-98 (1947)

Kinetics of Exothermal Reactions Occurring Under
Adiabatic Conditions

I. Gol'dman (Inst for Kino-Photo Research, Moscow)

(Wilson Dam ~~25~~ 2640)

Zh Fiz Khim Vol 21, page 1303-6 (1947)

Surface Conductivity of Solid Dielectrics
by N. Chirkov

AEC Trans (avail. Brookhaven) RT-1956

SLA R-3-02

13 218

Ca-1

VOL'KENSHTEIN F. F.

The electronic levels of atoms adsorbed on the surface of a crystal. I.

Zhur, Fiz. Khim., 21, No. 11, 1317-1334 (1947)

TT 167 - English

E u r a t o m

AEC TR-367

OTS 60-13726

13 206

Ca-1

VOL'KENSHTEIN F. F.

On the interactions between adsorbed molecules in connection
with the theory of adsorption of heterogeneous surfaces

Zhur. Fiz. Khim., 21, No. 2, 163-178 (1947)

TT 120 - English

E u r a t o m

AECTE 214

34. Fiz. Khim. Vol 21, 1373-86 (1947)

Absorption on and Structure of Activated
Charcoals II. Work on the Absorption of
Water Vapor

M. M. Dubinin
E. D. Zaverina

Done by Def Res Bd.,
Canada. (X-332)
1 Aug 1950 listing

The Kinetics of Ammonia Synthesis of Ruthenium,
by S. Kiperman, 30 pp.
RUSSIAN, per, Zhur Fiz. Khimii, Vol 21, No 12,
1947, pp 1435-1448. P911305167
ABC IB Tr-66

Sci-Chem
Sept 67

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Second Order Phase Transitions and Critical
Phenomena, by V. K. Semchenko

RUSSIAN, per, Zhur Fiz Khim, Vol XXI, 1947,
pp 1461-1469.

~~SECRET~~

Nat'l ~~SEC~~ Res Council Canada TT 108

Scientific - Physics

QUL CTS/DEX

Price 0.25

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Polarization of the Inner Surface of a Tube, by
O. S. Ksenzhek, V. V. Stender, 23 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, 1947, pp 117-127.

AEC-Tr-5820

Sci - Phys

Aug 63

~~241, 335~~
241, 335

Polarisation in the Polarography of Nickel and
Cobalt Pyridine Complexes, by Ya. I. Tur'yan
and G. F. Serova.

RUSSIAN, per, Zhur. fiz. Khim., Vol 31, 1957,
pp 1976-1982.

NLL RTS 3675

Sci-Chem
Nov 67

345,322

II. Approximated Calculation of Vibration Frequencies
of Alcohols, Ethers, and Amines, by N. M. Gopshtein,
12 pp.

RUSSIAN, per, Zhur Fiz. Khim, Vol XXII, No 1, 1948,
pp 11-19.

Sci Trans Center RT-408

Scientific - Physics
CTS/DEX

10,901

Frequency Calculation and the Interpretation of
Vibrational Spectra of Polyatomic Molecules. II.
Dimethyl Ether, Mercaptan, by S. I. Ryskina, 8 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXII, No 1, 1948,
pp 21-25.

CIA/FOC/NI-57
Sci Trans Center RT-407

SLA R-3000

10,910

Scientific - Physics

GTS/DEX

Zel'dovich, Ya.B.
BIJDRAGE TOT DE THEORIE VAN DE VOORTPLAN-
TING VAN FLAMMEN (Theory of propagation of
flames). tr. by G.J.M. Fritchy. 30 p. 16 refs.
MTWL: 467 (Text in Dutch).
Order from OTS or ETC \$2.45

61-17032

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1948,
v. 22, p. 27-48.

DESCRIPTORS: *Flame propagation, Theory.

61-17032

- I. Zel'dovich, Ya.B.
- II. MTWL-467
- III. Stichting Moelijk
Toegankelijke Wetenschap-
pelijke Literatuur.

Office of Technical Services

The Boiling Point and Heat of Evaporation of Some
Secondary Explosive Substances, by A. F. Elyakov.

RUSSIAN, per, Zhur Fiz Khim, No 1, 1949, pp 91-101

AMC/NAD 45475-D

14,989

Scientific - Chemistry Oct 1949 CTS

ZHUR FIZ KHIM Vol XXII, No 2

Feb 1948

"The Valence States of the Carbon Atom" $2\frac{1}{4}$ pp

M. A. Kovner

Available a) Brookhaven
AEC tr - 229
July 1950

64T18

Oxidation of Ammonia on Platinum and Platinum-Rhodium
Gauze, I, II, by L. Apel'baum, M. Tomkin (PA 6420,
6421), 35 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXII, 1948, No 2,
pp 179-194, 195-208.

CIA/FDD/X-98

SLAR-2989

Scientific - Chemistry

12,806

ZHUR FIZ KHIM Vol XXII, No 2

Feb 1948

46221-231

"Electrochemical Investigation of the Processes of
Corrosion of Metals in Solutions of Ethylene-Glycol"
11pp.

N. D. Tomashov, M. A. Timonova

Done by AMC
NAD 44774-D
copy in files

ATS RJ-4/56

64T67

ZHUR FIZ KHIM Vol XXII, No 2

Feb 1948

"Research on the Inflammability of Gas Mixtures" 8 pp

M. B. Neyman, Kh. M. Rubina

Done by AMC
NAD 44774-A
Copy in Files

64T85

A Kinetic Method of Physicochemical Analysis.
II. Kinetics of the Reaction of Tinsodium
Alloys With Ethyl Bromide Vapor, by M. B.
Heyman, V. A. Shushunov, 30 pp.

RUSSIAN, no per, Zhur Fiz, Khim, Vol XXII,
No 2, 1948, pp 145-155.

Sci Tr Center
RT-3924

37,879

Sci - Chemistry

Aug 1956

0720527-63-10177

Shushunov, V. A. and Shlapnikov, Yu. A.
KINETIC METHOD OF PHYSICAL CHEMICAL
ANALYSIS. III. KINETIC REACTION OF THE
TERNARY ALLOYS Na + Pb + Mg WITH THE VAPORS
OF ETHYL CHLORIDE. [1963] 10p. (figs. omitted)
7 refs.

Order from OTS or SLA \$1.10

63-16041

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1948,
v. 22 (no. 2) p. 157-160.

DESCRIPTORS: *Phase studies, Chemical analysis,
*Sodium alloys, *Lead alloys, *Magnesium alloys,
*Ethanes, Chlorides, Vapor pressure, Ethyl radicals,
Lead, Synthesis (Chemistry), Reaction kinetics.

It was established that the addition of magnesium to
NaPb alloy does not modify the character of the kinetic
curves of the reaction forming tetraethyllead. The
(Chemistry--Physical, TT, v. 10, no. 6) (over)

63-16041

I. Shushunov, V. A.
II. Shlapnikov, Yu. A.
III. Title: Kinetic...

Office of Technical Services

Neiman, M. B. and Shushunov, V. A.
KINETIC METHOD OF PHYSICAL CHEMICAL
ANALYSIS. IV. [THE TERNARY SYSTEM Na + Pb
+ K]. [1963] [16]p. 14 refs.
Order from OTS or SLA \$1.60

63-16042

Trans. of [Zhurnal Fizicheskoi Khimii] (USSR) 1948,
v. 22, no. 2, p. 161[=167].

DESCRIPTORS: *Phase studies, Chemical analysis,
*Sodium alloys, *Lead alloys, *Potassium alloys,
*Ethanes, Chlorides, Vapor pressure, Reaction
kinetics, Ethyl radicals, Lead, Synthesis (Chemistry),
*Intermetallic compounds, Sodium compounds,
*Plumbides,

It was stated that the addition of potassium to the
binary alloy NaPb, does not change the character of
the kinetical curves, markedly shortening induction
(Physical-Chemistry, TT, v. 10, no. 7) (over)

63-16042

I. Neiman, M. B.
H. Shushunov, V. A.
III. Title: Ternary...

Office of Technical Services

SEMENCHENKO, V.K., and SHAKHPARONOV, M. I.

R-3023. Verification of the general equation of solubility. Zhur. Fiz. Khim., 22, p.243-54, 1948. (15p.)

The Phenomenon of Excitation Lag of Internal Degrees
of Freedom During Chemical Reactions, 18 pp. by
A. E. Shtandel'

ZHUR-FIZ-KHIM

RUSSIAN, per, J. Phys. Chem. (USSR) No 3, 289 (1948).

Avail Armed Services Tech
Info Agency as ATI 83148

Scientific - Physics

15 30

ZHUR FIZ KHIM Vol XXII, No 3

Mar 1948

"The Electronic Theory of the Promotion and Poisoning
of Ionic Catalysts" 20 pp. pp. 311-330

F. F. Vol'kenshteyn

AEC Trans. 277

Avail a) Brookhaven

RJ-61

SLR R-1876

65T22

Several Invariant Quantities in the Theory of Heat
Conductivity and the Viscosity of Liquids, by
A. A. Predvoditelev, 10 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXII, No 3, Mar 1948.

PP 339-342.

CIA/FDD/X-1225

Scientific - Physics
~~EXX~~ DEX

SLA R-2607

10,021

Standard Electrode Potentials and E.M.F. Measurements
in Acetonitrile, by V. A. Pleskov, 24 pp.

RUSSIAN, ~~per:~~ Zhur Fiz Khim, Vol XXII, No 3, 1948,
pp 351-361.

Sci Trans Center RT-878

Physics
Scientific - ~~Chemistry~~

CTS/DEX

14,043

ZHUR FIZ KHIM

Vol XXII, No 4

Apr 1948

"The Kinetics of the Homogeneous Decomposition of
Acetone to Ketene in the Presence of Steam" 10 pp.

V. B. Fal'kovskiy, M. Ya. Kager

AEC Tr-354
Brookhaven

67T13

ZHUR FIZ KHIM

Vol XXII, No 4

Apr 1948

"Research on the Structure of the Bunsen Burner Flame"
11 pp.

K. S. Zarembo, Ya. B Zel'dovich

Done by Cryogenic Lab, Ohio State
AMC

Tech Intel Rpt NoF-TR-2265-IA-2

Kinetics of H-O System

1 March 1949

67T8

ZHUR FIZ KHIM

Vol XXII, No 4

Apr 1948

"Speeding Up the Slow Reaction of the Oxidation of Hydro-
gen by Steam" 3 pp

V. V. Voyevodskiy

Done by Cryogenic Lab, Ohio State
AMC

Tech Intel Rpt NoF-TR-2265-IA-2

1 Mar 1949

Kinetics of H-O System

67T14

The Investigation of the ~~Stm~~ Structure of the Bunsen
Flame, 14 pp. by K. S. Zarenbo and Ia. B. Zel'dovich

~~ZHUR-F12-KN14~~
RUSSIAN, per, ~~J. Phys. Chem.~~, (USSR), 22, No 4,
427-38 (1948).

Avail Armed Services Tech Info
Agency as ATI 83148

Scientific - Physics

1532

Ivanovskaya, T. and Mochan, I.
DE DISSOCIATIE VAN WATERSTOF OP ZUIVER EN
MET THORIUM BEDEKT WOLFRAAM (Dissociation
of hydrogen on pure and thoriated tungsten), tr. by
G.J.M. Fritschy. 9 p. 6 refs. MTWL:492. (Text in
Dutch)

Order from OTS or ETC \$0.80

61-17011

Trans. from Zhurnal Fizicheskoi Khimii (USSR) 1948,
v. 22, p. 439-443.

61-17011

1. Hydrogen- Decomposition
2. Tungsten-Surface properties
- I. Ivanovskaya, T.
- II. Mochan, I.
- III. MTWL-492
- IV. Stichting Moelijk Toegankelijke Wetenschappelijke Literatuur

Office of Technical Services

Kinetics and Mechanism of Catalytic Hydrogenation of
Carbon Monoxide, by G. Braude, N. Shurmovskaya, B.
Bruns.

Full translation.

RUSSIAN, no per, Zhur Fiz Khim, Vol XXII, No 4, 1948,
pp 483-494.

AEC Tr 1168

Sci - Chem

20 100 FM C-1000
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Apr 52 CTS

The Solubility of Metals and the Generalized
Moment, by V. K. Semenchenko, P. P. Pugachevich,
5 pp.

RUSSIAN, per, Zhurnal Fizicheskoi Khimii, Vol 22,
1948, pp 495-498. F911189367

AEC ANL Tr-464

327,868

Sci - Materials

Jun 67

ZHUR FIZ KHIM Vol XXII, No 4 *1513-520* Apr 1948

"Overvoltage of Hydrogen in Powdered Iron Electrodes"
7 pp.

S. A. Rozentsveyg, B. N. Kabanov

Translated

NRL Translation 229

151346

67T21

On the Question About the Acceleration of the Slow
Reaction of the Hydrogen Oxidation by Water Vapors,
5 pp. by V. V. Yur Voevodsky

ZHUR-FIZ-KHIM

RUSSIAN, per, J. Phys. Chem. (USSR), 22, No 4,
457-60 (1948).

Avail Armed Services Tech
Info Agency as ATI 83148

15-36

Scientific - Chemistry, Physics

ZHUR FIZ KHM

Vol XXII, No 5, 1948, 11 pp

"Intercrystalline Corrosion of Aluminum Alloys"

A.I. Golubev

Proj 1915

T-53-18

4956.1B

SR 5 Dec 49

68T94

ZHUR FIZ KHIM

Vol XII, No 5, 1948, 10 pp

"Set Valences"

pp 541-48

A. G. Lesnik

AEC Translation #216
not published
T-53-13

AR 22 Mar 1949

9-12-1948

5-12-1948

AT-1901

68T29

Kinetics of Combustion of In, Si and S in
Molten Fe, by A. N. Samarin.

RUSSIAN, per, Zh Fiz Khim, Vol 22, 1948,
pp 565-574.

*AEC ARL

Sci-Chem.

Jan 68

The Theory of Anomalous Phenomena Near the Melting
Points, by G. K. Martenev (PA 68225), 5 pp

RUSSIAN, per, Zhur Fiz Khim, Vol XXII, 1948,

pp 587-590.

CIA/FDD/X-172

SLA R-3020

Scientific - Physics

15,012

Formation of Complexes and Solid Solutions
in the Ternary System of Potassium Rubidium
and Magnesium Fluorides, by E. P. Dergunov,
A. G. Bergman. UNCL

RUSSIAN, per, Zhur Fiz Khim, Vol XXII, No 5,
1948, pp 625-632.

SLR 60-15730
DSIR LIU M.1320

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Sci - Chem
May 60

116,510

The Field of Propagation of Cold Flame in Mixtures of Ethyl Ether and Air. Pt. 19 of Investigation of the Conditions of Ignition of Gas Mixtures, by M. B. Neyman, Kh. M. Rubina, R. B. Shnol, 7 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXII, No 6, 1948, pp 641-646.

SLA 60-13717

Sol

190,251

Apr 62

Vol IV, No 6

The Fundamental Rate of Propagation of Cold Flame in Mixtures of Ethyl Ether and Air. Pt. 20 of Investigation of the Conditions of Ignition of Gas Mixtures, by M. B. Neyman, Kh. M. Rubins, R. B. Shol, 8 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXII, No 6, 1948, pp 647-653.

SLA 60-13718

Sci

190,252

Apr 62

Vol IV, No 6

The Poisoning of the Catalyst of Blacking, by S. Z.
Roginskii, 13 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXII, No 6, 1948,
pp 655-667.

CIA/PDD/X-1162

Scientific - *Chemistry*
~~Physics~~
OTS/TEX

Available in CIA Library
as Ohio State University
C 27830

8167

The Study of the Kinetics of Electrode Reactions
by Means of Alternating Currents, by V. Ershler,
UNCLASSIFIED

RUSSIAN, Zhur Fiz Khim, 1948, Vol 22, p 683.

Sci Mus Lib No 52/2937
SLH 59-19105

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Polarization of Porous Electrodes. I. Distribution
of Current and Potential Within the Electrode, by
V. A. S. Daniel'bek, 27 pp.

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RUSSIAN, per, Zhur Fiz Khim, Vol XXII, 1948,
pp 697-710.

ABO-Tr-5814

ATS-820718

Sci - Nucl Sci

Aug 63

343,421

Theory of Diffusional Kinetics of Heterogeneous Chemical Processes. II. Reactions Taking Place at the Solid/Liquid Interface During Turbulent Flow, by V. Levich

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